B R E V I O R A

Museum of Comparative Zoology

Cambridge, Mass. December 21, 1964 Number 211

A NEW SPECIES OF THE SNAKE *LEPTOTYPHLOPS* FROM COLOMBIA

By Benjamin Shreve

In a shipment of snakes sent to me for identificaton by Hermano Nicéforo Maria of the Instituto de La Salle of Bogotá, Colombia, one appears to represent an undescribed species. Another specimen, in the Museum of Comparative Zoology collection, is apparently of the same species.

Thanks are due the following individuals for lending comparative material from the collections in their charge: Mr. Charles M. Bogert of the American Museum of Natural History (AMNH), Dr. Doris M. Cochran of the United States National Museum (USNM), Miss Alice G. C. Grandison of the British Museum (Natural History) (BMNH), and Dr. William Duellman of the University of Kansas Museum of Natural History (UKMNH).

The new snake will be given a name suggested by the exceedingly low dorsal scale count.

Leptotyphlops brevissima sp. nov.

Holotype. Museo del Instituto de La Salle No. 1311, from Florencia, Caquetá, Colombia, collected by Nicéforo Maria February 10, 1951.

Paratype. MCZ No. 38950 (taken from the stomach of *Micrurus mipartitus* (Duméril, Duméril and Bibron), MCZ No. 21988, from Sonsón, Antioquia, Colombia, collected by Nicéforo Maria in 1925. This specimen has about a third of the head missing on the right side.

Diagnosis. Apparently most closely related to *Leptotyphlops macrolepis* (Peters) and *L. anthracina* Bailey, from which it differs in a lower dorsal and subcaudal count (Table 1), and in coloration (brown rather than black as in *anthracina* and without the prominent white borders of the ventral scales of *macrolepis*). Also related to *L. dugandi* Dunn to which it is nearest in longitudinal dorsal count (but without overlap, Table 1). *L. dugandi*, however, has still fewer subcaudals and a very different coloration: a whitish unmarked venter, a striped dorsal pattern, and a whitish fore part of the head.

Description. (Paratype variation in parentheses.) Snout rounded; supraocular present, small; rostral extending nearly to level of eyes; nasal completely divided into two; ocular bordering the lip; three labials, two in front of, and one behind the ocular; second labial not reaching the eye; six lower labials; 14 scales around body at midbody; dorsal scales from rostral to tail spine 152 (164); subcaudals 13 (14).

Coloration in alcohol. Above, dark brown; below, light brown; scales, both above and below, narrowly bordered with whitish. The coloration resembles quite closely that of *L. goudotii* (Duméril and Bibron).

MEASUREMENTS (in millimeters)

	head and body	tail
holotype	63	5
paratype	127	11

Remarks. The paratype was formerly identified as *L. macrolepis* by the late Karl P. Schmidt, who found it during his work on the coral snakes. It may be that other specimens of *brevissima* have been similarly misidentified; longitudinal counts have been made all too infrequently.

The dorsal coloration of the two species is quite similar.

The ventral coloration of *macrolepis* gives the impression of a whitish ground color covered with brown spots, as each ventral scale has a brown spot in its center with much of the ground color visible around it. In contrast, the ventral coloration of *brevissima* appears to be a uniform light brown, but on close examination it is seen that each scale has a very narrow light border.

The coloration of *anthracina* appears to be even more similar to that of the new form. The pattern of spotting on each scale seems identical, but the brown coloration of *brevissima* is represented by black in *anthracina* (or gray in some preserved animals).

In order to shed more light on the relationships, material referred to *macrolepis* was borrowed from various institutions. The following *macrolepis* were examined: *Venezuela.* Caracas: USNM 62206, 107891. Chama, 200 meters: BMNH 1905.5.31.63. El Valle, Federal District: AMNH 59406. Mérida, 1600 meters: BMNH 1903.4.28.12, 1904.6.30.2-5. Pauji, Acosta District: MCZ 48752-3, 48918. Puerto Cabello: BMNH 1913.9.10.2. No definite locality: BMNH R.R.1964.33. *Colombia.* In swampy country of the Choco: MCZ 39705. New Grenada, Amazonas: AMNH 17538 (in very poor condition). *Brazil.* Maués, Amazonas: AMNH 91642. *British Guiana.* Rupununi District, north of Acarahy Mts., west of New River: UKMNH 69821.

E. R. Dunn (1944, p. 52) lists specimens of *macrolepis* from the following localities of Colombia: *Norte de Santander:* Ocaña (1200 meters), two; *Santander:* Barichara (1336 meters), three; San Gil (1095 meters), four; *Tolima:* Mariquita (535 meters), one; Guamo (402 meters), one; Chaparral (800 meters), two.

It can be seen from this list and the material mentioned previously that there is no absolute evidence of sympatry between the new form and what is regarded as *macrolepis.* In addition, there is no positive evidence that all of Dunn's material was properly identified; he only reports the longitudinal dorsal scale count of one example and this is, of course, a critical point in separating the species. Unfortunately, all the Colombian material examined by Dunn was consumed by fire some years ago at the Museo del Instituto de La Salle.

The dorsal and subcaudal counts of the specimens of *macrolepis* examined, and those taken from the literature, are 202-246 and 16-26, respectively. Those taken from the literature are those of J. A. Roze (1952, p. 153), E. R. Dunn (1944, p. 52) and J. R. Bailey (1946, pp. 3, 4). It may be that with such a wide range of extremes in these counts, more than one form is involved. At all events, the dorsal scale counts are considerably higher than those of *brevissima* (152-164).

Among the specimens received on loan as *macrolepis* was AMNH 35953 from Balzapamba, Ecuador. This has 183 dorsal scales from rostral to tail spine, 16 subcaudals, the usual 14 scales around midbody, and a head and body measurement of 113 mm, tail 12 mm. In these characters and in coloration the specimen matches *anthracina*, the only member of this complex known from Ecuador; as *anthracina*, it represents the third known locality for this species.

L. anthracina with scale counts (J. R. Bailey, 1946, p. 3) of 182-189 dorsals and 15-19 subcaudals is closely related indeed to *brevissima.* It may be that *anthracina* and *brevissima* are only subspecifically distinct. If so, it may be that the very low dorsal counts of *brevissima* may represent ''character displacement'' in northern *anthracina* populations, sympatric with *macrolepis.* However, the difference in coloration between *anthracina* and *brevissima* or *macrolepis* is not readily explainable on this hypothesis. It would be expected that *anthracina,* outside the range of *macrolepis,* would be as similar in coloration as it is in scales to *macrolepis,* instead of exhibiting a coloration which is more different from that of *macrolepis* than is that of *brevissima.*

REFERENCES CITED

Bailey, Joseph R.

1946. *Leptotyphlops anthracinus,* a new blind snake from eastern Ecuador. Occ. Pap. Mus. Zool. Univ. Mich., No. 492: 1-5.

Dunn, Emmett Reid

1944. A review of the Colombian snakes of the families Typhlopidae and Leptotyphlopidae. Caldasia, **3** (11): 47-55.

Roze, Janis A.

1952. Contribucion al conocimiento de los ofidios de las familias Typhlopidae y Leptotyphlopidae en Venezuela. Mem. Soc. Cien. Nat. La Salle, **12** (32): 143-158.

TABLE 1

	brevissima	*anthracina*	*macrolepis*	*dugandi*
dorsal longitudinal scale count:	152, 164	182-189	202-246	172-184
subcaudal scale count:	13, 14	15-19	16-26	9-12
dorsal color:	dark brown	black	brown	striped
ventral color:	light brown	black	spotted (scales with wide white borders)	whitish
head color:	dark brown	black	brown	whitish